Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Office of the Secretary Of Defense

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3:

PE 0303310D8Z I CWMD Systems: Advanced Technology Development

Date: February 2018

Advanced Technology Development (ATD)

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	172.581	19.587	33.382	26.644	-	26.644	25.452	25.340	25.120	24.915	Continuing	Continuing
004: Advanced Technology Demonstration	172.581	19.587	33.382	26.644	-	26.644	25.452	25.340	25.120	24.915	Continuing	Continuing

### Note

Reduction from FY 2018 to FY2019 the result of reallocation of resources across the portfolio in POM-19.

# A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command needs and research initiatives.

The CWMD Systems program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition them to mature capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program's legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. The Joint Requirements Oversight Council approved the Information Systems Initial Capabilities Document for CWMD Situational Awareness in 2015, which identifies the need for a family of systems to mitigate capability gaps identified by the Combatant Commands. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and direction for development of CWMD situational awareness capabilities. In June 2017, Deputy Commander USSOCOM requested support for development of a DoD CWMD "User Defined Operational Picture" (UDOP) that can access and share relevant WMD intelligence and operational information with DoD mission partners (Combatant Commands, U.S. Government agencies, and key allies). The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies and modifying existing systems. Existing DoD information systems, networks, and applications are utilized and/or modified using CWMD Systems funding. Development of new applications reuses software to the extent possible. The CWMD Systems program also funds technology-enabled analytical cells at the Defense Threat Reduction Agency and the Defense Intelligence Agency, which support Combatant Commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the transregional character of WMD proliferation.

The CWMD Systems program utilizes four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531).

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Office of the Secretary Of Defense

**Appropriation/Budget Activity** 

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

PE 0303310D8Z / CWMD Systems: Advanced Technology Development

**Date:** February 2018

This Program Element (PE) funds research, development, testing, and evaluation of materiel and non-materiel solutions to develop CWMD capabilities. Funds are used for development and integration of hardware or software technologies; contractor personnel for fusion cells at DTRA and DIA; research partnerships with DoD and civilian academic institutions, FFRDCs and UARCs; and interagency table-top exercises conducted on behalf of Combatant Commands.

This appropriation funds travel to support the requirements of this program, and work (including manpower) performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research, development and test and evaluation efforts.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	44.836	33.382	24.471	-	24.471
Current President's Budget	19.587	33.382	26.644	-	26.644
Total Adjustments	-25.249	0.000	2.173	-	2.173
<ul> <li>Congressional General Reductions</li> </ul>	-23.600	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Reallocation from other CWMD Systems</li> </ul>	-	-	2.173	-	2.173
programs					
• FFRDC	-0.022	-	-	-	-
<ul> <li>Economic adjustments</li> </ul>	-1.627	=	-	-	-

# **Change Summary Explanation**

FY2018 to FY2019 increase the result of reallocation of resources within the portfolio to better support full RDT&E cycle and technology transition.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the Secretary Of Defense									Date: February 2018			
Appropriation/Budget Activity 0400 / 3				,				Project (Number/Name) 004 I Advanced Technology Demonstration				
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
004: Advanced Technology Demonstration	172.581	19.587	33.382	26.644	-	26.644	25.452	25.340	25.120	24.915	Continuing	Continuing

# A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command needs and research initiatives.

The CWMD Systems program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition them to mature capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program's legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. The Joint Requirements Oversight Council approved the Information Systems Initial Capabilities Document for CWMD Situational Awareness in 2015, which identifies the need for a family of systems to mitigate capability gaps identified by the Combatant Commands. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and direction for development of CWMD situational awareness capabilities. In June 2017, Deputy Commander USSOCOM requested support for development of a DoD CWMD "User Defined Operational Picture" (UDOP) that can access and share relevant WMD intelligence and operational information with DoD mission partners (Combatant Commands, U.S. Government agencies, and key allies). The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies and modifying existing systems. Existing DoD information systems, networks, and applications are utilized and/or modified using CWMD Systems funding. Development of new applications reuses software to the extent possible. The CWMD Systems program also funds technology-enabled analytical cells at the Defense Threat Reduction Agency and the Defense Intelligence Agency, which support Combatant Commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the transregional character of WMD proliferation.

The CWMD Systems program utilizes four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531).

This project funds research, development, testing, and evaluation of materiel and non-materiel solutions to develop CWMD capabilities. Funds are used for development and integration of hardware or software technologies; contractor personnel for fusion cells at DTRA and DIA; research partnerships with DoD and civilian academic institutions, FFRDCs and UARCs; and interagency table-top exercises conducted on behalf of Combatant Commands.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the	ne Secretary Of Defense		Date: F	ebruary 2018	
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0303310D8Z I CWMD Systems: Advanced Technology Development		ject (Number/Name) I Advanced Technology Demonstra		
This appropriation funds travel to support the requirements of this or organizations under a contractual or grant arrangement with the					individuals
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
Title: Advanced Technology Demonstration			19.587	33.382	26.64
<b>Description:</b> Research, develop, test, and evaluate materiel and are used for development and integration of hardware or software DIA; research partnerships with DoD and civilian academic institution conducted on behalf of Combatant Commands.	technologies; contractor personnel for fusion cells at DTF	RA and			
FY 2018 Plans:  Continue development, integration, and/or modification of technology combatant Commands and specialized military units  Continue support to USSOCOM for development of DoD CWMD DTRA analytical cells  Conduct table-top exercises and senior leader seminars in support Commands  Continue CWMD-related research studies and analyses	"User Defined Operational Picture," including use of DIA	and			
FY 2019 Plans: Continue development, integration, and/or modification of technologopation Commands and specialized military units, building upor Continue support to USSOCOM for development and fielding of of DIA and DTRA analytical cells Conduct table-top exercises and senior leader seminars in support Commands Continue CWMD-related research studies and analyses	on projects initiated in FY2017 and FY2018  DoD CWMD "User Defined Operational Picture," including	g use			
FY 2018 to FY 2019 Increase/Decrease Statement: Reduction from FY 2018 to FY2019 the result of reallocation of re	sources across the portfolio in POM-19.				
	Accomplishments/Planned Programs Su	l-4-4-1-	19.587	33.382	26.64

**UNCLASSIFIED** 

PE 0303310D8Z: *CWMD Systems: Advanced Technology Develo...*Office of the Secretary Of Defense

**Remarks** 

Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the Secretary Of Defense  Date: February 2018								
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0303310D8Z I CWMD Systems: Advanced Technology Development		umber/Name) nnced Technology Demonstration					
D. Acquisition Strategy								

Develop, reuse, or enhance information technologies to field initial capabilities to end-users. As technologies mature and user needs are refined, systems or applications may transition to acquisition program(s) or be sustained separately. Integration of or interoperability among systems is also an acquisition pathway.

## **E. Performance Metrics**

Success in this area is measured by compliance with various statutes and DoD directives that govern the conduct of the affairs within the Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs (OASD/NCB). Maintain cost, schedule, and performance reporting, review, and adjudication. Maintain requirements traceability matrix.